What Is Claimed Is:

1. A two-dimensional code comprising:

a finding pattern area includes finding patterns for discriminating a code area from whole image;

5   a timing pattern area includes timing patterns for checking a position of data region and each cells in the data region from whole code image; and

a data area recorded various kind of predetermined data and decoding information of data itself.

10   2. The two-dimensional code as claimed in claim 1, wherein said finding pattern area is located in any one-side or faced each other two-side of edge surfaces, and

said finding patterns comprises a predetermined number of bars which are different from width with one another.

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3. The two-dimensional code as claimed in claim 2, wherein said finding patterns comprises two black bars wherein the width of said black bars are at least 1.5 times or more as a unit size of cell.

20   4. The two-dimensional code as claimed in claim 2, wherein said timing pattern area is located in at least any one or more sides of edge surface except said finding pattern area.

5. The two-dimensional code as claimed in claim 4, wherein said timing pattern area comprises at least one more row and column of edge surfaces in whole code plane, and size of cells in each areas are different from one another.

5   6. The two-dimensional code as claimed in claim 1, wherein said data area comprises:

a first data code,

a Reed-Solomon code,

a second data code coded and recorded an error level information of said

10   Reed-Solomon code, and

a BCH code.

7. The two-dimensional code as claimed in claim 6, wherein codeword data are extracted from said first data code and said Reed-Solomon code by error-level

15   decision of said Reed-Solomon code from said BCH code.

8. The two-dimensional code as claimed in claim 1, wherein said coded data recorded in said data area are at least one among a figure, mark, Korean alphabet, English alphabet or special character, etc.

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9. The two-dimensional code as claimed in claim 1, wherein said data is directly interpreted by decoding process.

10. The two-dimensional code as claimed in claim 1, further comprising a quiet zone for identification of an existence of said code, wherein a size of said quiet zone is at least 2X which is a standard unit size of cell in said code.

5   11. A two-dimensional code comprising:

a finding pattern area includes finding patterns for discriminating a code area from whole image and located in any one-side or faced each other two-side of edge surfaces;

a data area recorded various kind of predetermined data and decoding

10   information of data itself; and

wherein said finding patterns comprises a predetermined number of bars which are different from width with one another and sizes of at least two bars are 1.5 times or more as a unit size of cell.

15   12. A two-dimensional code comprising:

a timing pattern area includes timing patterns for checking a position of data region and each cells in the data region from whole code image;

a data area recorded various kind of predetermined data and decoding information of data itself; and

20   wherein said timing pattern area comprises at least one more row and column of edge surfaces in whole code plane, size and pattern of cells in each areas are different from one another.

13. A method for encoding of two-dimensional code comprising:

a step for inputting encoding-information objected to be encoded;

a step for decision a number of each codeword according to said

information;

5   a step for generating each codeword; and

a step for encoding data of said generated codeword.

14. The method for encoding of two-dimensional code as claimed in claim 13

further comprising a step for said data blocking after said data encoding.

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15. The method for encoding of two-dimensional code as claimed in claim 13,

wherein said inputted encoding information objected to be encoded comprises

objected data, size of cell and error correcting codes.

15   16. The method for encoding of two-dimensional code as claimed in claim 13,

said decision number of each codeword comprises a total codeword number,

data codeword number, and reed-solomon codeword number according to a

value inputted in said step for inputting information objected to be encoded.

20   17. The method for encoding of two-dimensional code as claimed in claim 13,

wherein said each codeword is generated to use said information inputted in

said step for inputting encoding-information and a pad character.

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18. The method for encoding of two-dimensional code as claimed in claim 13, wherein said data encoding is started to an ASCII encoding mode, and encoded that continuous two figures are double density and Korean alphabet is Korean encoding mode.

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19. The method for encoding of two-dimensional code as claimed in claim 13, wherein a BCH code is supplemented to the data area of the code in case that total number of cell in data area are more than 81.

10 20. The method for encoding of two-dimensional code as claimed in claim 14, wherein said data are blocked to sequentially stack by basic unit of 3 bytes.

21. The method for encoding of two-dimensional code as claimed in claim 13, wherein said encoded data is at least one more among a figure, mark, Korean

15 alphabet, English alphabet, special character or byte information.

22. A method for decoding of two-dimensional code comprising:

a step of scanning for physically or electrically code image;

a step of retrieving for finding pattern through said scanning;

20 a step of analogically interpretation for slope of total code image through said retrieved finding pattern;

a step of retrieving for timing pattern;

a step of computing a position of said code through said retrieved timing

pattern;

a step of fine tuning for said computed position and slope of code;

a step of extracting for grid coordinate in data area to use the coordinate formed by said each retrieved timing patterns;

5   a step of extracting for bit patterns of said each grids extracted from said grid coordinate in data area;

a step of extracting for code value from said extracted bit patterns;

a step of extracting for codeword from said extracted code value; and

a step of decoding for said extracted codeword.

10   23. The method for decoding of two-dimensional code claimed in claim 22, wherein said step of extracting for code value comprises:

a step of extracting for BCH code from said bit patterns;

a step of extracting for data and Reed-Solomon code from said bit patterns; and

15   a step of decision for error level of said Reed-Solomon code from said extracted BCH code.

24. The method for decoding of two-dimensional code as claimed in claim 22, wherein said codeword is extracted from said extracted code value and said
20   Reed-Solomon code.

25. A two-dimensional code comprising:

a data code inputted in a predetermined information;

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a Reed-Solomon code for correcting an error;

a code for recording an error level information; and

wherein said error level information recorded to said code includes single step information of error level which is possible to control an error level according to a using configuration of code.